

IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) ~~An~~ A piece of optical fiber having a length of ~~one kilometer~~ ~~(1 km)~~ twenty-five kilometers or more, and an average transmission loss at a wavelength of 1383 nanometer (nm) over the entire length of the piece less than an average transmission loss at a wavelength of 1310 nm over the entire length of the piece, and a zero dispersion wavelength in the vicinity of 1310 nm, wherein the maximum value of transmission loss at each of the wavelengths of 1310 nm and 1550 nm in any 1 km section taken along the optical fiber does not exceed an average transmission loss at said each of the wavelengths of 1310 nm and 1550 nm over the whole length of the piece by 0.03 dB/km or more, wherein characterized in that the maximum value of transmission loss at the wavelength of 1383 nm in any 1 km section taken along the optical fiber does not exceed an average transmission loss at the wavelength of 1383 nm over the entire length of the ~~optical fiber~~ piece by 0.03 dB/km or more.

Claim 2 (Original): The optical fiber according to claim 1, wherein the maximum value of transmission loss at the wavelength of 1383 nm in any 1 km section does not exceed the average transmission loss at the wavelength of 1383 by 0.01 dB/km or more.

Claim 3 (Original): The optical fiber according to claim 1, wherein a cable cutoff wavelength at a length of 22 meter (m) is less than 1380 nm.

Claim 4 (Original): The optical fiber according to claim 1, wherein the average transmission loss at the wavelength of 1383 nm is less than the transmission loss at the wavelength of 1310 nm after hydrogen ageing.

Claim 5 (Original): An optical fiber having an MFD of 8 micrometer (μm) or more at 1310 nm, zero dispersion wavelength out of a wavelength range of 1280 to 1324 nm, a dispersion in said wavelength range of 0.1 to 8.0 picosecond/nanometer/kilometer (ps/nm/km) in absolute value, a dispersion slope of 0.1 picosecond/nanometer²/kilometer ($\text{ps/nm}^2/\text{km}$) or less, a cutoff wavelength [of 1270 nm or less] determined according to a 22 m method not more than 1270 nm and an average transmission loss at the wavelength of 1310 nm of 0.4 dB/km or less.

Claim 6 (Original): The optical fiber according to claim 5, wherein said optical fiber has MFD at 1310 nm of 9.5 μm or less.

Claim 7 (Original): The optical fiber according to claim 5, wherein a zero dispersion wavelength exist within a wavelength range of 1325nm to 1350 nm.

Claim 8 (Original): The optical fiber according to claim 5, wherein an MFD at 1310 nm is A (μm) and a cutoff wavelength determined according to a 2 m method is B (nm), with satisfying $A \times B \leq 11 \times 1000$.

Claim 9 (Original): The optical fiber according to claim 5, wherein an average transmission loss at the wavelength of 1383 nm is less than an average transmission loss at the wavelength of 1310 nm.

Claim 10 (Original): The optical fiber according to claim 9, wherein an increase in transmission loss at wavelength of 1383 nm after hydrogen ageing is 0.04 dB/km or less.

Claim 11 (Withdrawn): A manufacturing method of an optical fiber having a mode field diameter of 8.0 to 11.0 μm at a wavelength of 1310 nm, an average transmission loss at a wavelength of 1383 nm less than an average transmission loss at a wavelength of 1310 nm, and a dispersion of +2 to +8 ps/nm/km at the wavelength of 1383 nm, comprising the steps of
drawing the optical fiber from an optical fiber preform, applying coating resins on said optical fiber, and
exposing said optical fiber to a deuterium containing atmosphere.

Claim 12 (Withdrawn): The manufacturing method of an optical fiber according to claim 11, wherein the optical fiber has a dispersion of +4 to +7 ps/nm/km at a wavelength of 1383 nm.

Claim 13 (Withdrawn): The manufacturing method of an optical fiber according to claim 11, wherein said step of exposing is performed by exposing the optical fiber to the deuterium containing atmosphere under an ordinary pressure at an ordinary temperature.

Claim 14 (Withdrawn): The manufacturing method of an optical fiber according to claim 13, wherein the exposing time in said step of exposing is 24 hours at longest.

Claim 15 (Withdrawn): The manufacturing method of an optical fiber according to claim 11, wherein an increase in transmission loss at the wavelength of 1383 nm after hydrogen ageing is 0.04 dB/km or less.

Claim 16 (Withdrawn): The manufacturing method of an optical fiber according to claim 11, wherein an increase in transmission loss at the wavelength of 1383 nm after hydrogen ageing is 0.01 dB/km or less.

Claim 17 (Withdrawn): A manufacturing method of an optical fiber, including an exposing step of exposing the optical fiber after drawing to a deuterium containing atmosphere, wherein a difference between average transmission losses respectively at the wavelengths of 1385 nm and 1420nm before said exposing step becomes different from a difference between average transmission losses respectively at the wavelengths of 1385 nm and 1420nm after said exposing step, by 0.01dB/km or more at least one time.

Claim 18 (Withdrawn): The manufacturing method of an optical fiber according to claim 17, wherein a time interval from the time point at which said deuterium processing is started to the time point at which said transmission loss is measured is 48 hours or more at 25°C.

Claim 19 (Withdrawn): The manufacturing method of an optical fiber according to claim 17, wherein the length of the optical fiber is 10 km or more and a cable cutoff wavelength at a length of 22 m of 1300 nm or less.

Claim 20 (Withdrawn): A manufacturing method of an optical fiber, comprising the steps of

drawing the optical fiber from an optical fiber preform, winding said optical fiber around a bobbin, and then immediately exposing said optical fiber to a deuterium containing atmosphere, wherein

said optical fiber is rewound around another bobbin while applying tensile tension, before said deuterium is completely degassed from said optical fiber.

Claim 21 (Withdrawn): The manufacturing method of an optical fiber according to claim 20, wherein said tensile tension corresponds to 0.5% to 2% in tensile strain of the optical fiber.

Claim 22 (Withdrawn): The manufacturing method of an optical fiber according to claim 20, wherein said optical fiber is cut and divided into predetermined lengths in the longitudinal direction when said optical fiber is rewound.